

### Remarks

Claims 1-7 and 21-25 were pending in the application. Claims 26-27 were added. Therefore, claims 1-7 and 21-27 are currently pending.

Support for the claim amendments and new claims can be found throughout the specification, for example:

<u>Claim</u>	<u>Specification</u>
4 and 5	Original claims 6 and 7
25	page 15, lines 21-22
26	page 16, lines 29-30
27	page 16, lines 8-10

### ***35 U.S.C. § 112, Second Paragraph***

Claims 4, 5 and 23 were rejected under 35 U.S.C. § 112, second paragraph, on the ground that the claims were indefinite.

Claims 4 and 5 were amended to clarify that each peptide has one of the three molecular weights listed. The amended language mimics the language used in claims 6 and 7 (which is presumably definite because that language was not similarly rejected).

Claim 23 was amended to clarify that the peptide is labeled.

In view of these amendments, Applicants respectfully request that the 35 U.S.C. § 112, second paragraph rejection be withdrawn.

### ***Objection to claim 25***

Claim 25 was objected to on the ground that it is not different from claim 1. As suggested by the examiner, Claim 25 was amended to include another component of the kit. In view of this amendment, Applicants respectfully request that the objection to claim 25 be withdrawn.

### ***35 U.S.C. § 102(a)***

Claim 1-7 and 21-25 were rejected under 35 U.S.C. § 102(a) as anticipated by Wilkins *et al.* (Annual meeting of American Society of Tropical Medicine and Hygiene, Lake Buena Vista,

FL (USA), December 7-11, 1997). Paragraph 4 of the enclosed § 132 Declaration states that the inventorship of the application is correct, and that Wilkins *et al.* discloses subject matter derived from the Applicants rather than invented by all of the named authors.

Therefore, Applicants respectfully submit that the Wilkins *et al.* abstract is not a § 102(a) reference, and request that the § 102(a) rejection be withdrawn.

### **35 U.S.C. § 102(b)**

Claims 1 and 21-25 were rejected under 35 U.S.C. § 102(b) as anticipated by McManus (*Papua New Guinea Med. J.* 38:287-94, 1995). Applicants respectfully request reconsideration because McManus does not disclose all elements of the claims as required by § 102(b). In fact, McManus discloses larval *T. solium* antigens, while the present invention is directed to adult secretory/excretory *T. solium* antigens. Therefore, the claims are not anticipated by this reference.

McManus discloses an immunoassay for diagnosis of *cysticercosis*, in which the *larval* form (*not* the adult form) of the pathogen is detected, by using antibodies prepared against *T. solium* cysts to detect parasite molecules present in the serum or CSF of a subject. In contrast, the present invention is directed to isolated *adult T. solium* extretory/secretory (TS/ES) peptides that can be used to detect anti-TS/ES antibodies in a biological sample to diagnose taeniasis, the adult form of the disease. The *adult-specific excretory/secretory T. solium* polypeptides of the present invention are different and distinct from the larval-specific cystic *T. solium* antigens disclosed in McManus. Therefore, the claims of the present invention are novel and non-anticipated in view of and McManus, and Applicants request that the 35 U.S.C. §102(b) rejection be withdrawn.

Since the MaManus reference fails to disclose or suggest the claimed TS/ES compounds, it also fails to establish a *prima facie* case of obviousness of the rejected claims.

### **35 U.S.C. § 103(a)**

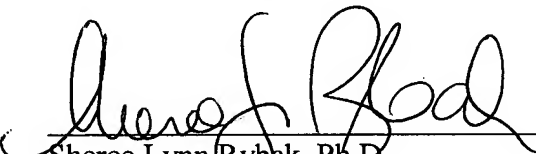
Claims 1-7 and 21-25 were rejected under 35 U.S.C. § 103(a) as unpatentable over Ko and Ng (*J. Helminthology* 72:147-54, 1998). Ko and Ng was published in June 1998. However, as discussed in the enclosed § 131 Declaration, the present inventors conceived and reduced to

practice the claimed secretory/extretory adult *T. solium* peptides before the effective date of the reference. Therefore, Applicants request that the §103(a) rejection be withdrawn.

If any matters remain before a Notice of Allowance is issued, the Examiner is invited to telephone the undersigned at the number below.

Respectfully submitted,

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